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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/071,472	02/08/2002	Attilio Rimoldi	005826.P002	9971	
	7590 05/03/200 OKOLOFF TAYLOR &	EXAM	EXAMINER		
12400 WILSHIRE BOULEVARD SEVENTH FLOOR			JONES, HUGH M		
	S, CA 90025-1030	ART UNIT	PAPER NUMBER		
	•		2128	,	
			MAIL DATE	DELIVERY MODE	
			. 05/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•.		Application No.	Applicant(s)	Applicant(s)				
Office Action Summary		10/071,472	RIMOLDI ET AL.					
		Examiner	Art Unit					
		Hugh Jones	2128					
Period fo	- The MAILING DATE of this communication r Reply	appears on the cover sheet	with the correspondence ac	ldress				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)  ズ	Responsive to communication(s) filed on 1	1/3/2006.						
·		This action is non-final.						
	·—							
,_	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims ,								
4)⊠	Claim(s) 1-30 is/are pending in the application	tion.						
•	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
•	6)⊠ Claim(s) <u>1-30</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)□	8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
9)□	The specification is objected to by the Exan	niner.						
10)⊠ The drawing(s) filed on <u>08 February 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	inder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the	•	en received in this National	Stage				
* 0	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen		🗖	O					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.								
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 11/3/2006.  5) Notice of Informal Patent Application 6) Other:								

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## **DETAILED ACTION**

1. Claims 1-30 of U. S. Application 10/071,472, filed 02/08/2002, are pending.

## Claim Objections

2. Claim 26 is objected to because of the following informalities: it appears claim 26 should depend from claim 15, and not claim 1. Appropriate correction is required. It is so interpreted for claim rejections.

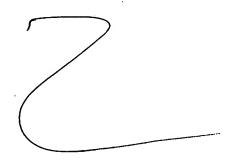
## Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 4. Claims 1-14, 23-25, 30 are rejected under 35 U.S.C. 101 as being directed to nonstatutory subject matter since the claims as a whole do not provide for a practical application, as evidenced by lack of physical transformation or a useful, tangible, and concrete result:
  - Claims 1-14: the claims as a whole are abstract and do not provide for a specific and substantial result;
  - claims 1-14 do not provide for a tangible result
  - claims 9, 11, 23-25, 30: the signal bearing medium and/or database is defined to encompass nonstatutory features (carrier waves). See:

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[0026] A machine-readable medium includes any mechanism for storing or transmitting information in a form readable by a machine (e.g., a computer). For example, a machine-readable medium includes read only memory ("ROM"); random access memory ("RAM"); magnetic disk storage media; optical storage media; flash memory devices; electrical, optical, acoustical or other form of propagated signals (e.g., carrier waves, infrared signals, digital signals, etc.); etc.

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network interface device 1322. For the purposes of this specification, the term "
computer-readable medium" shall be taken to include any medium that is capable of
storing or encoding a sequence of instructions for execution by the computer and
that cause the computer to perform any one of the methodologies of the present
invention. The term "computer-readable medium" shall accordingly be taken to
included, but not be limited to, solid-state memories, optical and magnetic disks, and
carrier wave signals.

## Claim Rejections - 35 USC § 102

- The following is a quotation of the appropriate paragraphs of 35U.S.C. 102 that form the basis for the rejections under this section made in thisOffice action:
- 6. A person shall be entitled to a patent unless
  - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Shih et al. (Applicant's IDS).
- 8. Shih et al. disclose parametric modeling including linkages between part volume and functionality. See fig. 1, 4; "Constraint module", "parametric module".

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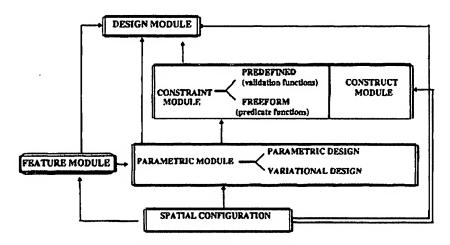


Figure 1: EDM high level architecture

Parametric Module contains entity types that represent the various 'ways' the user inputs the 'parameters' and chooses the operations. Hence, it uses the individual design types and constraints defined in the Design Module (they are like

the token or coins we drop into the machine) and Constraint Module (they are like the different choices) as its basic structure. The Parametric Module and its relations with other modules can be depicted by the following diagram:

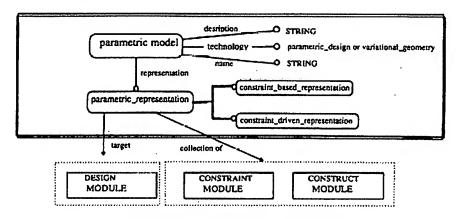


Figure 4: Architecture of Parametric Module

Based on Solver characteristics:

1. Parametric Design: Stands for the type of solver which requires an explicit order for the constraints/conditions to compute the solution stepwise. Such technology can be viewed as showing HOW. The process is represented by a list (i.e. ordered) of (design, constrain) pair or a list of construct entity types, Recall that a construct entity type is an entity type with built-in Constraints.

design elements and operator is a choice of constraint as defined in the Constraint module or the Construct module.

#### 4. TECHNOLOGY APPLICATION

#### 4.1 Demonstration

A work-in-process demonstration was conducted for the PDES, Inc. Technical Advisory Committee which showed exchange of some geometric constraints (nazilely

# 9. Any inquiry concerning this communication or earlier communications from the examiner should be:

directed to: Dr. Hugh Jones telephone number (571) 272-3781,

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Monday-Thursday 0830 to 0700 ET,

or

the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, telephone number (703) 305-3900.

### mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

## or faxed to:

(703) 308-9051 (for formal communications intended for entry) **or** (703) 308-1396 (for informal or draft communications, please label *PROPOSED* or *DRAFT*).

Dr. Hugh Jones
Primary Patent Examiner
April 15, 2007

